

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

A substitute specification which corrects an obvious typographic error is being submitted. The substitute specification changes “codes” to “cords” throughout and does not introduce new matter because one skilled in the art would recognize that tires have cords, and not codes. See MPEP § 2163.07(II).

Claims 18 and 19 have been rewritten in independent form. Claims 13, 14 and 24 have been canceled. The remaining claims depend from Claim 19.

Claim 18 recites a feature of the invention whereby a belt layer arranged on the outer circumference of the body ply comprises a single oblique belt layer comprising oblique steel belt cords and at least one spirally wound belt layer in which a belt cord is spirally wound on an outer circumference of the oblique belt layer substantially in parallel with the tire circumferential direction. An example of this is shown in Figure 7 (second embodiment) having the oblique belt layer 25. Claim 19 recites a feature of the invention whereby a belt layer wound on an outer circumference of the body ply comprises at least one spirally wound belt layer and at least two oblique belt layers in which steel belt cords are *inclined in the same direction*, and in the angular range recited in the claims, relative to the circumferential direction. An example of this is shown in Figure 10 (third embodiment) in which the oblique belt layers 33 and 34 are inclined in the same direction.

In each case the steel belt cords are inclined in only one direction. This is to be contrast with the conventional tire arrangement in which belt layers are wound with the respective belt cords oriented in two opposite directions to cross mutually with one another. In the case of the prior art, however, the respective crossing belt cords interfere and cancel the belting functioning of one layer with respect to the other. This causes the distribution of

the ground contact pressure on the ground contact surface to be uneven and the tire grip to be reduced.

On the other hand, such cancellation does not occur for the single oblique belt layer 25 or the oblique belt layers 33 and 34 inclined in the same direction, which permits a more even distribution of the ground contact pressure (see paragraph bridging pages 21-22). In the case of the oblique belt layer comprising a single oblique steel belt layer and at least one spirally wound belt layer in which a belt cord is spirally wound on an outer circumference of the oblique belt layer substantially in parallel with the tire circumferential direction, as recited in Claim 18, the belting function is reduced as compared to the conventional two crossed oblique belt layers but tire weight is reduced and the pressure in the contact area of the tire is equalized, which improves braking performance and steering stability. In the case of two oblique belt layers in which steel belt cords are inclined in the same direction and at least one spirally wound belt layer is spirally wound on outer circumferences of the oblique belt layers substantially in parallel with the tire circumferential direction, as recited in Claim 19, the pressure in the contact area of the tire can be equalized without reducing the belting function as compared to the prior art.

Evidence of such improved results is found in the Examples of Table 1 shown on page 30 of the specification. That is, each of the Examples 1-5 of Table 1 respectively corresponds to one of the embodiments (page 29, lines 9-10), and so Examples 2 and 3 are respectively based on embodiments 2 and 3 shown in Figures 7 and 10. The "prior art" tire of Table 1, on the other hand, is based on Figure 20 in which the cords of the belt layers 71 and 72 are inclined in opposite directions. As is evident from Table 1, the tire of Examples 2 and 3 each exceeds the performance of the prior art tire in all of the tested performance categories: dry braking, wet braking, steering stability and wear resistance.

Claim 18 was rejected under 35 U.S.C. § 102 as being anticipated by either Japanese patent publication 2002-63310 (Jardine) or U.S. patent 6,926,053 (Miyazaki et al). Claim 19 was rejected under 35 U.S.C. § 103 as being obvious over Jardine. However, both Jardine and Miyazaki et al disclose conventional cross belted tires. See Figures 3 and 4 of Jardine (Figures 3 and 4 of corresponding U.S. patent 6,533,012) in which the cords of the belt layers 12 and 13 are inclined in opposite directions; crossed reinforcing plies 5-6 of Miyazaki et al. Thus neither of these references teaches the single oblique belt layer of Claim 18 or the two oblique belt layers inclined in the same direction of Claim 19, and so these claims are not anticipated by the cited prior art.

Additionally, Claims 18 and 19 would not have been obvious from the prior art having crossed reinforcing belts because they recite features that run contrary to the conventional wisdom that crossed reinforcing belts provide superior performance. The improved results of Table 1 are thus unexpected and comprise evidence of unobviousness.

The rejection of dependent Claim 15 under 35 U.S.C. § 103 as being obvious over JP 05-000604 is believed to be moot in view of its amendment to be dependent from Claim 19. Additionally, dependent Claim 20 defines over Jardine in view of JP 6-191219 (see Office Action, paragraph 7), in view of its dependency from Claim 19.

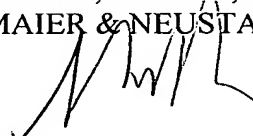
Applicant therefore believes that the present application is in a condition for allowance and respectfully solicits an early Notice of Allowability.

Respectfully submitted,

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